Serial Number: 09/975143

CRF Processing Date: 11/05/01
Edited by: _AH_
Verified by: _____

0590/
-1102

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was 'wrapped' down to the next line.

☑ Edited a format error in the Current Application Data section, specifically:
inserted fields 150 and 151

☐ Edited the Current Application Data section with the actual current number. The number inputted applicant was ☐ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited we _____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. I applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included:

ENTERED

☐ Deleted extra, invalid, headings used by an applicant, specifically: _____

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at ☐ page numbers throughout text; ☐ other invalid text, such as_____

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically: _____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically: _____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted _ending_ stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingl due to a PatentIn bug). Sequences corrected: _____

☐ Other: _____
_____
_____
_____

*Examiner: The above corrections must be communicated to the applicant in the first O Action. DO NOT send a copy of this form.

```
         RAW SEQUENCE LISTING              DATE: 11/05/2001
         PATENT APPLICATION:  US/09/975,143    TIME: 13:19:57

         Input Set : A:\PTO.MH.txt
         Output Set: N:\CRF3\11052001\I975143.raw

 4 <110> APPLICANT: HSU, Daniel, K.
 5        LIU, Fu-Tong
 6        DOWLING, Christopher, A.
 8 <120> TITLE OF INVENTION: GALECTIN EXPRESSION IS INDUCED IN
 9        CIRRHOTIC LIVER AND HEPATOCELLULAR CARCINOMA
11 <130> FILE REFERENCE: DANHSU.001C1
13 <140> CURRENT APPLICATION NUMBER: US/09/975,143
14 <141> CURRENT FILING DATE: 2001-10-10
16 <150> PRIOR APPLICATION NUMBER: PCT/US00/08561
17 <151> PRIOR FILING DATE: 2000-03-29
20 <160> NUMBER OF SEQ ID NOS: 47
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 50
26 <212> TYPE: PRT
27 <213> ORGANISM: chicken
29 <400> SEQUENCE: 1
30 Met Gln Ala Met Lys Ala Arg Cys Trp Gln Pro His Trp Met Leu Pro
31 1               5                  10                  15
32 Leu Leu Pro Leu Ser Ser Pro Leu His Pro Gln Leu Ser Asp Ala Leu
33              20                  25                  30
34 Pro Ala His Asn Pro Gly Ala Pro Pro Gln Gly Trp Asn Arg Pro
35              35                  40                  45
36 Pro Gly
37      50
40 <210> SEQ ID NO: 2
41 <211> LENGTH: 50
42 <212> TYPE: PRT
43 <213> ORGANISM: chicken
45 <400> SEQUENCE: 2
46 Pro Gly Ala Phe Pro Ala Tyr Pro Gly Tyr Pro Gly Ala Tyr Pro Gly
47 1               5                  10                  15
48 Ala Pro Gly Pro Tyr Pro Gly Ala Pro Gly Pro His His Gly Pro Pro
49              20                  25                  30
50 Gly Pro Tyr Pro Gly Gly Pro Pro Gly Pro Tyr Pro Gly Gly Pro Pro
51              35                  40                  45
52 Gly Pro
53      50
56 <210> SEQ ID NO: 3
57 <211> LENGTH: 27
58 <212> TYPE: PRT
59 <213> ORGANISM: nematode
61 <400> SEQUENCE: 3
62 Met Ser Ala Glu Glu Pro Lys Ser Tyr Pro Val Pro Tyr Arg Ser Val
63 1               5                  10                  15
64 Leu Gln Glu Lys Phe Glu Pro Gly Gln Thr Leu
65              20                  25
```

C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/975,143
C--> 14 <141> CURRENT FILING DATE: 2001-10-10

ENTERED

RAW SEQUENCE LISTING   DATE: 11/05/2001
PATENT APPLICATION: US/09/975,143   TIME: 13:19:57

        Input Set : A:\PTO.MH.txt
        Output Set: N:\CRF3\11052001\I975143.raw

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68 <210> SEQ ID NO: 4
69 <211> LENGTH: 17
70 <212> TYPE: PRT
71 <213> ORGANISM: eel
73 <400> SEQUENCE: 4
74 Ser Gly Gly Leu Gln Val Lys Asn Phe Asp Phe Thr Val Gly Lys Phe
75 1               5                  10                  15
76 Leu
80 <210> SEQ ID NO: 5
81 <211> LENGTH: 43
82 <212> TYPE: PRT
83 <213> ORGANISM: chicken
85 <400> SEQUENCE: 5
86 Tyr Pro Gly Gly Pro Pro Gly Pro Tyr Pro Gly Gly Pro Thr Ala Pro
87 1               5                  10                  15
88 Tyr Ser Glu Ala Pro Ala Ala Pro Leu Lys Val Pro Tyr Asp Leu Pro
89             20                  25                  30
90 Leu Pro Ala Gly Leu Met Pro Arg Leu Leu Ile
91          35                  40
94 <210> SEQ ID NO: 6
95 <211> LENGTH: 33
96 <212> TYPE: PRT
97 <213> ORGANISM: rat
99 <400> SEQUENCE: 6
100 Met Ala Tyr Val Pro Ala Pro Gly Tyr Gln Pro Thr Tyr Asn Pro Thr
101 1               5                  10                  15
102 Leu Pro Tyr Lys Arg Pro Ile Pro Gly Gly Leu Ser Val Gly Met Ser
103             20                  25                  30
104 Ile
108 <210> SEQ ID NO: 7
109 <211> LENGTH: 12
110 <212> TYPE: PRT
111 <213> ORGANISM: mouse
113 <400> SEQUENCE: 7
114 Pro Ile Pro Gly Gly Leu Ser Val Gly Met Ser Val
115 1               5                  10
118 <210> SEQ ID NO: 8
119 <211> LENGTH: 18
120 <212> TYPE: PRT
121 <213> ORGANISM: human
123 <400> SEQUENCE: 8
124 Met Ala Cys Gly Leu Val Ala Ser Asn Leu Asn Leu Lys Pro Gly Glu
125 1               5                  10                  15
126 Cys Leu
130 <210> SEQ ID NO: 9
131 <211> LENGTH: 33
132 <212> TYPE: PRT
133 <213> ORGANISM: human
135 <400> SEQUENCE: 9
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RAW SEQUENCE LISTING   DATE: 11/05/2001
PATENT APPLICATION: US/09/975,143   TIME: 13:19:57

Input Set : A:\PTO.MH.txt
Output Set: N:\CRF3\11052001\I975143.raw

```
136 Met Ala Tyr Val Pro Ala Pro Gly Tyr Gln Pro Thr Tyr Asn Pro Thr
137 1               5               10              15
138 Leu Pro Tyr Tyr Gln Pro Ile Pro Gly Gly Leu Asn Val Gly Met Ser
139             20              25              30
140 Val
144 <210> SEQ ID NO: 10
145 <211> LENGTH: 42
146 <212> TYPE: PRT
147 <213> ORGANISM: nematode
149 <400> SEQUENCE: 10
150 Ile Val Lys Gly Ser Thr Ile Asp Glu Ser Gln Arg Phe Thr Ile Asn
151 1               5               10              15
152 Leu His Ser Lys Thr Ala Asp Phe Ser Gly Asn Asp Val Pro Leu His
153             20              25              30
154 Val Ser Val Arg Phe Asp Glu Gly Lys Ile
155         35              40
158 <210> SEQ ID NO: 11
159 <211> LENGTH: 41
160 <212> TYPE: PRT
161 <213> ORGANISM: eel
163 <400> SEQUENCE: 11
164 Thr Val Gly Gly Phe Ile Asn Asn Ser Pro Gln Arg Phe Ser Val Asn
165 1               5               10              15
166 Val Gly Glu Ser Met Asn Ser Leu Ser Leu His Leu Asp His Arg Phe
167             20              25              30
168 Asn Tyr Gly Ala Asp Gln Asn Thr Ile
169         35              40
172 <210> SEQ ID NO: 12
173 <211> LENGTH: 39
174 <212> TYPE: PRT
175 <213> ORGANISM: chicken
177 <400> SEQUENCE: 12
178 Thr Ile Thr Gly Thr Val Asn Ser Asn Pro Asn Arg Phe Ser Leu Asp
179 1               5               10              15
180 Phe Lys Arg Gly Gln Asp Ile Ala Phe His Phe Asn Pro Arg Phe Lys
181             20              25              30
182 Glu Asp His Lys Arg Val Ile
183         35
186 <210> SEQ ID NO: 13
187 <211> LENGTH: 41
188 <212> TYPE: PRT
189 <213> ORGANISM: rat
191 <400> SEQUENCE: 13
192 Tyr Ile Gln Gly Ile Ala Lys Asp Asn Met Arg Arg Phe His Val Asn
193 1               5               10              15
194 Phe Ala Val Gly Gln Asp Glu Gly Ala Asp Ile Ala Phe His Phe Asn
195             20              25              30
196 Pro Arg Phe Asp Gly Trp Asp Lys Val
197         35              40
```

RAW SEQUENCE LISTING   DATE: 11/05/2001
PATENT APPLICATION: US/09/975,143   TIME: 13:19:57

          Input Set : A:\PTO.MH.txt
          Output Set: N:\CRF3\11052001\I975143.raw

```
200 <210> SEQ ID NO: 14
201 <211> LENGTH: 41
202 <212> TYPE: PRT
203 <213> ORGANISM: mouse
205 <400> SEQUENCE: 14
206 Tyr Ile Gln Gly Met Ala Lys Glu Asn Met Arg Arg Phe His Val Asn
207 1               5                   10                  15
208 Phe Ala Val Gly Gln Asp Asp Gly Ala Asp Val Ala Phe His Phe Asn
209             20                  25                  30
210 Pro Arg Phe Asp Gly Trp Asp Lys Val
211         35                  40
214 <210> SEQ ID NO: 15
215 <211> LENGTH: 41
216 <212> TYPE: PRT
217 <213> ORGANISM: human
219 <400> SEQUENCE: 15
220 Arg Val Arg Gly Glu Val Ala Pro Asp Ala Lys Ser Phe Val Leu Asn
221 1               5                   10                  15
222 Leu Gly Lys Asp Ser Asn Asn Leu Cys Leu His Phe Asn Pro Arg Phe
223             20                  25                  30
224 Asn Ala His Gly Asp Ala Asn Thr Ile
225         35                  40
228 <210> SEQ ID NO: 16
229 <211> LENGTH: 41
230 <212> TYPE: PRT
231 <213> ORGANISM: human
233 <400> SEQUENCE: 16
234 Tyr Ile Gln Gly Val Ala Ser Glu His Met Lys Arg Phe Phe Val Asn
235 1               5                   10                  15
236 Phe Val Val Gly Gln Asp Pro Gly Ser Asp Val Ala Phe His Phe Asn
237             20                  25                  30
238 Pro Arg Phe Asp Gly Trp Asp Lys Val
239         35                  40
242 <210> SEQ ID NO: 17
243 <211> LENGTH: 44
244 <212> TYPE: PRT
245 <213> ORGANISM: nematode
247 <400> SEQUENCE: 17
248 Val Leu Asn Ser Phe Ser Asn Gly Glu Trp Gly Lys Glu Glu Arg Lys
249 1               5                   10                  15
250 Ser Asn Pro Ile Lys Lys Gly Asp Ser Phe Asp Ile Arg Ile Arg Ala
251             20                  25                  30
252 His Asp Asp Arg Phe Gln Ile Ile Val Asp His Lys
253         35                  40
256 <210> SEQ ID NO: 18
257 <211> LENGTH: 48
258 <212> TYPE: PRT
259 <213> ORGANISM: eel
261 <400> SEQUENCE: 18
```

```
262 Val Met Asn Ser Thr Leu Lys Gly Asp Asn Gly Trp Glu Thr Glu Gln
263 1               5                   10              15
264 Arg Ser Thr Asn Phe Thr Leu Ser Ala Gly Gln Tyr Phe Glu Ile Thr
265              20                  25              30
266 Leu Ser Tyr Asp Ile Asn Lys Phe Tyr Ile Asp Ile Leu Asp Gly Pro
267          35                  40                  45
270 <210> SEQ ID NO: 19
271 <211> LENGTH: 46
272 <212> TYPE: PRT
273 <213> ORGANISM: chicken
275 <400> SEQUENCE: 19
276 Val Cys Asn Ser Met Phe Gln Asn Asn Trp Gly Lys Glu Glu Arg Thr
277 1               5                   10              15
278 Ala Pro Arg Phe Pro Phe Glu Pro Gly Thr Pro Phe Lys Leu Gln Val
279              20                  25              30
280 Leu Cys Glu Gly Asp His Phe Lys Val Ala Val Asn Asp Ala
281          35                  40                  45
284 <210> SEQ ID NO: 20
285 <211> LENGTH: 45
286 <212> TYPE: PRT
287 <213> ORGANISM: rat
289 <400> SEQUENCE: 20
290 Val Phe Asn Thr Met Gln Ser Gly Gln Trp Gly Lys Glu Glu Lys Lys
291 1               5                   10              15
292 Lys Ser Met Pro Phe Gln Lys Gly His His Phe Glu Leu Val Phe Met
293              20                  25              30
294 Val Met Ser Glu His Tyr Lys Val Val Val Asn Gly Thr
295          35                  40                  45
298 <210> SEQ ID NO: 21
299 <211> LENGTH: 45
300 <212> TYPE: PRT
301 <213> ORGANISM: mouse
303 <400> SEQUENCE: 21
304 Val Phe Lys Thr Met Gln Ser Gly Gln Trp Gly Lys Glu Glu Lys Lys
305 1               5                   10              15
306 Lys Ser Met Pro Phe Gln Lys Gly Lys His Phe Glu Leu Val Phe Met
307              20                  25              30
308 Val Met Pro Glu His Tyr Lys Val Val Val Asn Gly Asn
309          35                  40                  45
312 <210> SEQ ID NO: 22
313 <211> LENGTH: 46
314 <212> TYPE: PRT
315 <213> ORGANISM: human
317 <400> SEQUENCE: 22
318 Val Cys Asn Ser Lys Asp Gly Gly Ala Trp Gly Thr Glu Gln Arg Glu
319 1               5                   10              15
320 Ala Val Phe Pro Phe Gln Pro Gly Ser Val Ala Glu Val Cys Ile Thr
321              20                  25              30
322 Phe Asp Gln Ala Asn Leu Thr Val Lys Leu Pro Asp Gly Tyr
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/975,143

DATE: 11/05/2001
TIME: 13:19:58

Input Set : A:\PTO.MH.txt
Output Set: N:\CRF3\11052001\I975143.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date